APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,005	01/16/2001	Sung-Won Lee	678-595 (P9710)	6052

28249 7590 10/17/2005		EXAMINER
DILWORTH & BARRESE, LLP		SCHEIBEL, ROBERT C
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UNIONDALE, NY 11553	ART UNIT	PAPER NUMBER
	2666	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 August 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 26-35* is/are rejected.

7)☒ Claim(s) *24 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All b)☐ Some * c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

- Applicant's Amendment and Request for Continued Examination filed 8/8/2005 is acknowledged.

- Claim 1 has been amended.

- Claims 1-35 are pending.

Response to Arguments

1.   Applicant's arguments, see pages 10-12, filed 8/8/2005, with respect to the rejection of claims **1-2, 4, 8-11, 16-19, 26-29, and 34-35** under 35 U.S.C. 102(a), have been fully considered but they are not persuasive.

Applicant summarizes the status of the case in paragraphs 1-3 on page 10. Applicant then generally summarizes the invention in paragraph 4 on page 10. While the general summary appears to be consistent with the specification, examiner notes that this summary includes many limitations that are not in any way part of the independent claims such as claim 1. Applicant then restates the definition of two fields from the 3GPP2 document used in the aforementioned rejection and summarizes the relevant sections of the 3GPP2 document on the rest of page 11. Again, this summary appears to be accurate. Applicant then concludes in the first paragraph of page 12 that the sequence number of the present invention is different than that of the 3GPP2 document because of the additional limitation added to claim 1 that the number is used to identify a sequential order of the channel assignment messages. Examiner disagrees with this conclusion. A sequence number clearly indicates a sequential order of messages and this is the primary purpose of a sequence number. The name *sequence* number alone suggests this.

Examiner understands that the sequence number applied to the channel assignment message is generated from the corresponding channel request message and is not independently applied to the channel assignment messages. However, this does not mean that these numbers no longer indicate the sequence of the messages. As the sequence number is clearly applied sequentially to the channel request messages, it follows that applying these same sequence numbers to the channel assignment messages will also indicate the sequential order of these messages. Therefore, new claim 1 is still rejected under 35 U.S.C. 102(a) using the 3GPP2 reference. Similarly, the original claims 2, 4, 8-11, 16-19, 26-29, and 34-35 are also still rejected under 35 U.S.C. 102(a) using the 3GPP2 reference.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2.   Claims **1-2, 4, 8-11, 16-19, 26-29, and 34-35** are rejected under 35 U.S.C. 102(a) as being anticipated by 3rd Generation Partnership Project 2 "3GPP2", C.S0005-0 Version 1.0 ("3GPP2" hereinafter).

Regarding claim **1**, 3GPP2 discloses in section 3.7.3.3.2.24 the step of generating a channel assignment message (the Supplemental Channel Assignment Message described in the table) including a start time for channel assignment (REV_START_TIME/FOR_START_TIME), a duration of the channel assignment

(REV_DURATION/FOR_DURATION), and a sequence number (SCRM_SEQ_NUM) for message identification. 3GPP2 also discloses the step of transmitting the channel assignment message to a mobile station on an existing traffic channel in section 2.6.4.1.2 (see lines 7-8 and 23-26 on page 2-171). 3GPP2 discloses the limitation that the sequence number is used for identifying each of a plurality of channel assignment messages on pages 3-261 to 3-262 which indicate that "the base station shall set this field to the sequence number corresponding to the SCRM-SEQ-NUM field in a Supplemental Channel Request Message to which the mobile station is to match this message", thus indicating that this field is used for identifying the message. The limitation that the sequence number identifies a sequential order for each of the channel assignment messages is clear from the name sequence number. It is well known that the purpose of a sequence number is to identify a sequence (in order) of packets. As the sequence number will clearly be applied sequentially to the channel request message, it follows that applying the same number to the channel assignment messages will also indicate a sequential order of the messages.

Regarding claim **9**, 3GPP2 discloses in section 3.7.3.3.2.24 and in figure 2.6.6.2.5.1.1-1 and 2.6.6.2.5.1.1-2 the step of receiving a plurality of channel assignment messages successively. The fields of the channel assignment message (start time (REV_START_TIME/FOR_START_TIME), a duration (REV_DURATION/FOR_DURATION), a sequence number for message identification (SCRM_SEQ_NUM), and a channel identifier for channel identification (BASE_CODE_CHAN)) are disclosed in section 3.7.3.3.2.24. The limitation of receiving a plurality of channel assignment messages is disclosed in figures 2.6.6.2.5.1.1-1 and 2.6.6.2.5.1.1-

2. 3GPP2 also discloses the step of transmitting the channel assignment message to a mobile station on an existing traffic channel in section 2.6.4.1.2 (see lines 7-8 and 23-26 on page 2-171). The step of storing the received channel assignment messages in a memory according to the start times, durations, and sequence numbers of the channel assignment messages is disclosed in the section from line 4 on page 2-288 through line 40 on page 2-292; this section describes that the various message fields are to be stored in the mobile station. Figures 2.6.6.2.5.1.1-1 and 2.6.6.2.5.1.1-2 also disclose the limitation that data communication is conducted on channels assigned by the channel assignment messages.

Regarding claim 17, 3GPP2 discloses in section 3.7.3.3.2.24 and in figure 2.6.6.2.5.1.1-1 and 2.6.6.2.5.1.1-2 the step of receiving a plurality of channel assignment messages successively. The fields of the channel assignment message (start time (REV_START_TIME/FOR_START_TIME), a duration (REV_DURATION/FOR_DURATION), a sequence number for message identification (SCRM_SEQ_NUM), and a channel identifier for channel identification (BASE_CODE_CHAN)) are disclosed in section 3.7.3.3.2.24. The limitation of receiving a plurality of channel assignment messages is disclosed in figures 2.6.6.2.5.1.1-1 and 2.6.6.2.5.1.1-2. 3GPP2 also discloses the step of transmitting the channel assignment message to a mobile station on an existing traffic channel in section 2.6.4.1.2 (see lines 7-8 and 23-26 on page 2-171). The step of storing the received channel assignment messages in a memory according to the start times, durations, and sequence numbers of the channel assignment messages is disclosed in the section from line 4 on page 2-288 through line 40 on page 2-292; this section describes that the various message fields are to be stored in the mobile station. The limitation of conducting data

communication on a channel corresponding to the channel identifier of a first read channel

assignment message for a period between the start time and the end of the duration set in the read

channel assignment message is disclosed in the "Assignment 1" message and the associated

channel usage in Figure 2.6.6.2.5.1.1-1 (b). The limitation of then on a channel corresponding to

the channel identifier of a next read channel assignment message for a period between the start

time and the end of the duration set in the next channel assignment message, the start time of the

next channel assignment message being set to or after the end of the data communication

according to the first read channel assignment message is disclosed in the "Assignment 2"

message and the associated channel usage in Figure 2.6.6.2.5.1.1-1 (b). This figure clearly

shows that the start time of the next channel assignment message is after the end of the data

communication according to the first channel assignment message.

Regarding claim 27, 3GPP2 discloses the limitation of a receiver for receiving a plurality

of channel assignment messages successively from a base station on an existing traffic channel,

each of the channel assignment messages having the fields of a start time, a duration, a sequence

number for message identification, and a channel identifier for channel identification in section

3.7.3.3.2.24 and in figure 2.6.6.2.5.1.1-1 and 2.6.6.2.5.1.1-2 as described above in claims 9 and

17. The receiver is inherent to a system receiving channel assignment messages as the means of

receiving these messages. 3GPP2 discloses the limitation of a memory having a scheduling table

for storing the received channel assignment messages and the limitation of a controller for

storing the received channel assignment message in the scheduling table of the memory

according to the durations and sequence numbers of the channel assignment messages are

disclosed in the section from line 4 on page 2-288 through line 40 on page 2-292. This section

describes that the various message fields are to be stored in the mobile station; this information

must be stored in some sort of memory. Further, 3GPP2 discloses the limitation of the controller

sequentially reading the stored channel assignment messages, and assigning channels based on

the channel identifiers of the read channel assignment messages, for data communication in

figures 2.6.6.2.5.1.1-1 and 2.6.6.2.5.1.1-2. These figures show (a) that the channel assignment

messages are processed after they are received and (b) that they are processed in the order they

are received (indicating that they are stored for later processing and sequentially read). The use

of the channel based on the respective assignment messages also indicates that channels are

assigned based on the channel identifiers of the read channel messages.

Regarding claims **2, 10, 18, and 28**, 3GPP2 discloses the step of deleting a previous

channel assignment message in lines 4-7 of page 2-320 and figure 2.6.6.2.5.1.1-2. The second

message replaces the first, thus effectively deleting it.

Regarding claims **4, 11, 19, and 29**, 3GPP2 discloses the step of updating a previous

channel assignment message in figure 2.6.6.2.5.1.1-1 (a). The first channel assignment is

updated by the second channel assignment to extend the duration of the first channel assignment.

Regarding claims **8, 16, 26, and 35**, 3GPP2 discloses the limitation that the channel

assignment message(s) are supplemental channel assignment message(s) in the title of section

3.7.3.3.2.24 "Supplemental Channel Assignment Message".

Regarding claim **34**, 3GPP2 discloses the limitation of conducting data communication

on a channel corresponding to the channel identifier of a first read channel assignment message

for a period between the start time and the end of the duration set in the read channel assignment

message is disclosed in the "Assignment 1" message and the associated channel usage in Figure

2.6.6.2.5.1.1-1 (b). The limitation of then on a channel corresponding to the channel identifier of

a next read channel assignment message for a period between the start time and the end of the

duration set in the next channel assignment message, the start time of the next channel

assignment message being set to or after the end of the data communication according to the first

read channel assignment message is disclosed in the "Assignment 2" message and the associated

channel usage in Figure 2.6.6.2.5.1.1-1 (b). This figure clearly shows that the start time of the

next channel assignment message is after the end of the data communication according to the

first channel assignment message.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claim **3** is rejected under 35 U.S.C. 103(a) as being unpatentable over 3rd Generation

Partnership Project 2 "3GPP2", C.S0005-0 Version 1.0 ("3GPP2" hereinafter) in view of U.S.

Patent 4,612,637 to Davis et al.

3GPP2 discloses all the limitations of parent claim 2 as discussed in the rejection under

35 U.S.C. 102(a) above. 3GPP2 does not disclose expressly the limitation of setting the message

duration of the channel assignment message to 0 of claim 3. Davis discloses the limitation of

deleting (canceling) an assignment message by setting the duration field to zero in lines 7-10 of

column 6. Davis sets the Aloha parameter to zero to cancel an rqs message. In lines 41-43 of

column 4, Davis indicates that the Aloha message is the number of available time slots, which is

equivalent to the available message duration. 3GPP2 and Davis are analogous art because they

are from the same field of endeavor of channel assignment for data communications. At the time

of the invention it would have been obvious to a person of ordinary skill in the art to modify

3GPP2 to use a zero duration to delete/cancel a previous channel assignment. The motivation for

doing so would have been to prevent collisions among users as suggested by Davis in lines 9-10

of column 6 ("prevents other users from transmitting while the called party is transmitting

RDY".) Therefore, it would have been obvious to combine Davis with 3GPP2 for the benefit of

preventing collisions to obtain the invention as specified in claim 3.

5.   Claims **5, 7, 12, 14, 20, 22, 30, and 32** are rejected under 35 U.S.C. 103(a) as being

unpatentable over 3rd Generation Partnership Project 2 "3GPP2", C.S0005-0 Version 1.0

("3GPP2" hereinafter) in view of U.S. Patent 6,011,806 to Herring.

Regarding claims 5 and 7, 3GPP2 discloses all the limitations of parent claim 4 as

discussed in the rejection under 35 U.S.C. 102(a) above. 3GPP2 does not disclose expressly the

limitations of claims 5 and 7 of setting the sequence number according to the previous channel

assignment message when updating a channel assignment. Herring discloses the limitations of

claim 5 of setting the sequence number of the channel assignment message according to the

sequence number of the previous channel assignment message in lines 9-13 of column 9.

According to the broad language of the current claims, the duplication of the command is

considered to update the command and thus disclose the limitation of claim 5. Since the

transmitter assumes that the original command was not received, the duplication of this

command effectively updates the receiver. Similarly, the limitation of claim 7 that the sequence

number of the updating channel assignment message is set to be equal to the sequence number of

the previous channel assignment message is disclosed by Herring. 3GPP2 and Herring are

analogous art because they are from the same field of endeavor of data communications. At the

time of the invention it would have been obvious to a person of ordinary skill in the art to modify

3GPP2 to use the same sequence number as in the previous channel assignment message when

updating a channel assignment. The motivation for doing so would have been to uniquely

identify which channel assignment is being updated. Therefore, it would have been obvious to

combine Herring with 3GPP2, as modified above, for the benefit of identifying the message to be

updated to obtain the invention as specified in claims 5 and 7.

Regarding claims 12, 14, 20, 22, 30, and 32, 3GPP2 discloses all the limitations of parent

claims 10-11, 18-19, and 28-29 as discussed in the rejection under 35 U.S.C. 102(a) above.

3GPP2 does not disclose expressly the limitations of claims 12, 14, 20, 22, 30, and 32. Herring

discloses the limitation of determining that a message was already received or stored in memory

if a message with an identical sequence number is received from line 67 of column 3 through

line 2 of column 4. 3GPP2 and Herring are analogous art because they are from the same field

of endeavor of data communications. At the time of the invention it would have been obvious to

a person of ordinary skill in the art to use the sequence number to determine if a channel

assignment has already been received. The motivation for doing so would have been to identify

when duplicate information is being received. Therefore, it would have been obvious to combine

Herring with 3GPP2 for the benefit of detecting duplicate information to obtain the invention as

specified in claims 12, 14, 20, 22, 30, and 32.

6.   Claim **6** is rejected under 35 U.S.C. 103(a) as being unpatentable over 3rd Generation

Partnership Project 2 "3GPP2", C.S0005-0 Version 1.0 ("3GPP2" hereinafter) in view of U.S.

Patent 4,612,637 to Davis et al in further view of U.S. Patent 6,011,806 to Herring.

Regarding claim 6, the combination of 3GPP2 and Davis discloses all the limitations of

parent claim 3 as discussed above. 3GPP2 and Davis does not disclose expressly the limitation

of claim 6. However, it is well known in the art that a sequence number is used to identify a

previous message. For example, consider Herring, which discloses the limitation of setting the

sequence number to be the same as that of the previous sequence number in lines 9-13 of column

9. 3GPP2 and Herring are analogous art because they are from the same field of endeavor of

data communications. At the time of the invention it would have been obvious to a person of

ordinary skill in the art to modify 3GPP2, as modified above, to use the same sequence number

as in the previous channel assignment message when deleting a channel assignment. The

motivation for doing so would have been to uniquely identify which channel assignment is being

deleted. Therefore, it would have been obvious to combine Herring with 3GPP2, as modified

above, for the benefit of identifying the message to be deleted to obtain the invention as specified

in claim 6.

7.   Claims **13, 15, 21, 23, 31, and 33** are rejected under 35 U.S.C. 103(a) as being

unpatentable over 3rd Generation Partnership Project 2 "3GPP2", C.S0005-0 Version 1.0

("3GPP2" hereinafter) in view of U.S. Patent 6,011,806 to Herring in further view of U.S. Patent 4,612,637 to Davis et al.

Regarding claims 13, 15, 21, 23, 31, and 33, 3GPP2, modified by Herring above, discloses all the limitations of parent claims 12, 14, 20, 22, 30, and 32 as described in the rejection above. 3GPP2, modified, does not disclose expressly the limitation of using the value of the duration field to distinguish whether to delete or update the channel assignment information as disclosed in claims 13, 15, 21, 23, 31, and 33. Davis discloses the limitation of deleting (canceling) an assignment message by setting the duration field to zero in lines 7-10 of column 6. Davis sets the Aloha parameter to zero to cancel an rqs message. In lines 41-43 of column 4, Davis indicates that the Aloha message is the number of available time slots, which is equivalent to the available message duration. It similarly follows that a non-zero duration would indicate that the message was simply updating (duplicating) the original message as disclosed by Herring and discussed in the rejection of the parent claims above. 3GPP2 and Davis are analogous art because they are from the same field of endeavor of channel assignment for data communications. At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify 3GPP2 to use a zero duration to delete/cancel a previous channel assignment. The motivation for doing so would have been to prevent collisions among users as suggested by Davis in lines 9-10 of column 6 ("prevents other users from transmitting while the called party is transmitting RDY".) Therefore, it would have been obvious to combine Davis with 3GPP2 for the benefit of preventing collisions to obtain the invention as specified in claims 13, 15, 21, 23, 31, and 33.
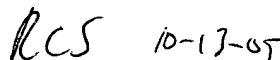
Allowable Subject Matter

8.   Claims **24-25** are objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-3169.

The examiner can normally be reached on Monday and Thursday from 6:30-5:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RCS 10-17-05

Robert C. Scheibel
Examiner
Art Unit 2666